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REMARKS

In the Final Office Action, Examiner Leykin rejected pending claims 1, 2, 5-8, 10, 11, 14-17, 19, 20, and 23-26 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,411,060 to Jung in view of U.S. Patent No. 6,448,736 to Lajsner et al., and pending claims 3, 4, 9, 12, 13, 18 and 21-27 under 35 U.S.C. §103(a) as being unpatentable Jung in view of Lajsner and U.S. Patent No. 6,075,332 to McCann. The Applicant respectfully traverses these obviousness rejections, but nonetheless has cancelled claims 1-27 herein for consideration in a continuation application, and added new claims 28-54 herein. The Applicant respectfully asserts that new claims 28-54 are allowable over the art of record, particularly Jung, Lajsner, and McCann, and respectfully requests reconsideration and further examination of the present application under 37 CFR § 1.114.

In particular, the art of record fails to disclose, teach or suggest the following limitations of new claims 28-52:

- 1. "subsequent to the aligning of the rotor pole and the stator pole, preliminarily cranking the rotor in a direction as dictated by the actuation command for a predetermined time period to thereby facilitate a subsequent rotation of the rotor to a holding position" as recited in independent claim 28,
- 2. "rotating the rotor to the holding position upon an expiration of the predetermined time period" as recited in dependent claim 29;
- 3. "minimizing any current losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position" as recited in dependent claim 30;

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4. "minimizing any heating losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position" as recited in dependent claim 31;

- 5. "subsequent to identifying the first phase of the motor as the target phase, exclusively exciting a second phase of the motor and the first phase of the motor in a sequential manner to thereby rotate the rotor pole to the initial position, the second phase being adjacent the first phase" as recited in independent claim 32;
- 6. "aligning the first phase of the motor to thereby align the rotor pole to a stator pole adjacent the target position", and "subsequent to aligning the first phase of the motor, concurrently exciting a third phase of the motor and a fourth phase of the motor to thereby align the rotor pole to the target position" as recited in independent claim 33;
- 7. "cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner to thereby crank the rotor in the desired direction from the pre-alignment position", and "subsequent to cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner, rotating the rotor in the desired direction to a holding position" as recited in independent claim 34;
- 8. "dithering the rotor upon the rotor being in the holding position for a predetermined time period" as recited in independent claim 35;

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- 9. "subsequent to rotating the rotor from a pre-alignment position to the holding position, reducing an ampere level of a phase current corresponding to the holding position as a function of a motor torque corresponding to the holding position" as recited in independent claim 36;
- 10. "means for, subsequent to the aligning of the rotor pole and the stator pole, preliminarily cranking the rotor in a direction as dictated by the actuation command for a predetermined time period to thereby facilitate a subsequent rotation of the rotor to a holding position" as recited in independent claim 37;
- 11. "means for rotating the rotor to the holding position upon an expiration of the predetermined time period" as recited independent claim 38;
- 12. "means for minimizing any current losses of the switchedreluctance motor subsequent to rotating the rotor to the holding position" as recited independent claim 39;
- 13. "means for minimizing any heating losses of the switchedreluctance motor subsequent to rotating the rotor to the holding position" as recited independent claim 40;
- "means for, subsequent to identifying the first phase of the motor as the target phase, exclusively exciting a second phase of the motor and the first phase of the motor in a sequential manner to thereby rotate the rotor pole to the initial position, the second phase being adjacent the first phase" as recited in independent claim 41;

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"means for aligning the first phase of the motor to thereby align the rotor pole to a stator pole adjacent the target position", and "means for, subsequent to aligning the first phase of the motor, concurrently exciting a third phase of the motor and a fourth phase of the motor to thereby align the rotor pole to the target position" as recited in independent claim 42;

- 16. "means for cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner to thereby crank the rotor in the desired direction from the pre-alignment position", and "means for, subsequent to cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner, rotating the rotor in the desired direction to a holding position" as recited independent claim 43;
- 17. "means for dithering the rotor upon the rotor being in the holding position for a predetermined time period" as recited independent claim 44;
- "means for, subsequent to rotating the rotor from a pre-alignment position to the holding position, reducing an ampere level of a phase current corresponding to the holding position as a function of a motor torque corresponding to the holding position" as recited in independent claim 45;
- 19. "means for, subsequent to the aligning of the rotor pole and the stator pole, preliminarily cranking the rotor in a direction as dictated by the actuation command for a predetermined time period to thereby facilitate a subsequent rotation of the rotor to a holding position" as recited in independent claim 46;

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20. "means for rotating the rotor to the holding position upon an expiration of the predetermined time period" as recited independent claim 47;

- 21 "means for minimizing any current losses of the switchedreluctance motor subsequent to rotating the rotor to the holding position" as recited independent claim 48;
- 22. "means for minimizing any heating losses of the switchedreluctance motor subsequent to rotating the rotor to the holding position" as recited independent claim 49;
- 23. "means for, subsequent to identifying the first phase of the motor as the target phase, exclusively exciting a second phase of the motor and the first phase of the motor in a sequential manner to thereby rotate the rotor pole to the initial position, the second phase being adjacent the first phase" as recited in independent claim 50;
- 24. "means for aligning the first phase of the motor to thereby align the rotor pole to a stator pole adjacent the target position", and "means for, subsequent to aligning the first phase of the motor, concurrently exciting a third phase of the motor and a fourth phase of the motor to thereby align the rotor pole to the target position" as recited in independent claim 51;
- 25. "means for cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner to thereby crank the rotor in the desired direction from the pre-alignment position", and

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"means for, subsequent to cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner, rotating the rotor in the desired direction to a holding position" as recited independent claim 52;

- 26. "means for dithering the rotor upon the rotor being in the holding position for a predetermined time period" as recited independent claim 53; and
- 27. "means for, subsequent to rotating the rotor from the pre-alignment position to the holding position, reducing an ampere level of a phase current corresponding to the holding position as a function of a motor torque corresponding to the holding position" as recited in independent claim 54.

Withdrawal of the obviousness rejection of cancelled claims 1-27, and an allowance of new claim 28-54 is therefore respectfully requested.

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SUMMARY

Examiner Leykin's obviousness rejections of claims 1-27 have been obviated by the cancellation herein of claims 1-27 for consideration in a continuation application. The Applicant has supported an allowance of new claims 28-54 as added herein by pointing out the limitations from new claims 28-54 that are neither disclosed, taught nor suggested by the art of record. The Applicant respectfully submits that new claims 28-54 as added herein fully satisfy the requirements of 35 U.S.C. §§ 102, 103 and 112. In view of the foregoing amendments and remarks, favorable consideration and early passage to issue of the present application are respectfully requested. If any points remain in issue that may best be resolved through a personal or telephonic interview, Examiner Leykin is respectfully requested to contact the undersigned at the telephone number listed below.

Dated: December 30, 2003

Respectfully submitted, Bruno P.B. Lequesne

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